

Amendment to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Original) A method of making a pigment composition, comprising the step of making a pigment selected from:

(i) a ferrocyanide derivative substituted with one or more cationic dye groups in the presence of a suspension of a zeolite pigment in an acidified solution; and

(ii) a derivative of a complex acid selected from the group consisting of : silicomolybdate, phosphomolybdate, phosphotungstate, phosphotungstomolybdate and mixtures thereof, substituted with one or more cationic dye groups in the presence of a suspension of a zeolite pigment in an acidified solution.

2. (Original) A method as claimed in claim 1, wherein the ferrocyanide derivative has the formula (1):



wherein M is a transition metal selected from a copper, nickel or vanadium in a reduced state;

Z is a zeolite structure, preferably a zeolite pigment or calcined clay, more preferably an ultramarine base;

D is a cationic dye; and

p, q and r are integers from 1 to 3 wherein the total of $p + q + r = 4$.

3. (Original) A method as claimed in claim 1, wherein the complex acid derivative has the formula (2):



wherein A is a complex acid;

Z and D are as defined in formula 1; and

q and r are integers from 1 to 3 wherein the total of $q + r = 4$ to 7.

4. (Currently Amended) A method as claimed in ~~any preceding~~ claim 1, wherein the pigment is selected from ultramarine blue, ultramarine pink, ultramarine violet and ultramarine green and mixtures thereof.

5. (Original) A method as claimed in claim 4 wherein the zeolite pigment is ultramarine blue.

6. (Currently Amended) A method as claimed in ~~any of claim~~[[s]] ~~1, 2, 4, and 5~~, wherein the ferrocyanide derivative is functionalised with a dye selected from the following groups:

Diarylmethane type dyes such as Basic yellow 37,

Azomethane type dyes such as Basic Yellow 65,

Monoazo type dyes such as Basic orange 59,

Xanthene type dyes including all Rhodamine dyes,

Triarylmethane type dyes such as Victoria Blue, and

Cumarin type dyes such as Basic yellow 40.

7. (Currently Amended) A method as claimed in ~~any of claim~~[[s]] ~~1, 2, 4, 5, and 6~~, wherein the ferrocyanide derivative is functionalised with a basic dye selected from:

basic blue 1, 3, 7, 9, 11, 26, 41, 54, and 162;

basic violet 1, 3, 10, 14, 16 and 53;

basic green 1 and 4;

basic orange 2 and 21;

basic brown 1 and 4;

basic red 7, 13, 14, 18, 22, 29, 46, and 51;

basic yellow 2, 5, 11, 13, 19, 24, 28, 29, 30, 37, 40, and 51;

basic red 1, 1:1, 7, 11, 13, 14, 18, 22, 29, 46, and 51; and

mixtures thereof.

8. (Original) A method as claimed in claim 3, wherein the complex acid is selected from:

i) silicon, molybdenum, and/or tungsten (SMT) complexes; and

ii) phosphorus, molybdenum, and/or tungsten (PTM) complexes.

9. (Original) A method as claimed in claim 8, wherein the proportion of SiO_2 : MO_3 is 1 : (7-12); or the proportion of P_2O_5 : MO_3 is 1 : (16-24);

wherein M represents the combined molecular total of molybdenum and tungsten.

10. (Currently Amended) A method as claimed in claim 3 wherein the complex acid derivative is functionalised with a dye selected from the following groups:

Diarylmethane type dyes such as Basic yellow 37,

Azomethane type dyes such as Basic Yellow 65,

Monoazo type dyes such as Basic orange 59,

Xanthene type dyes including all Rhodamine dyes,

Triarylmethane type dyes such as Victoria Blue , and

Cumarin type dyes such as Basic yellow 40.

11. (Currently Amended) A method as claimed in claim 3, ~~or any claim dependent on claim 3~~, wherein the complex acid derivative is functionalised with a basic dye selected from:

basic blue 1, 3, 7, 9, 11, 26, 41, 54, and 162;

basic violet 1, 3, 10, 14, 16 and 53;

basic green 1 and 4;

basic orange 2 and 21;

basic brown 1 and 4;

basic red 7, 13, 14, 18, 22, 29, 46, and 51;

basic yellow 2, 5, 11, 13, 19, 24, 28, 29, 30, 37, 40, and 51 ;

basic red 1, 1:1, 7, 11, 13, 14, 18, 22, 29, 46, and 51; and

mixtures thereof.

12. (Currently Amended) A method as claimed in ~~any preceding~~ claim 1, further comprising an additional step of resination, wherein the resin is an alkali soluble abietic acid derivative.

13. (Original) A method as claimed in claim 12, wherein the resin is a pentaerythritol modified resin.

14. (Currently Amended) A method as claimed in ~~any preceding~~ claim 1, including the step of adding a surfactant.

15. (Original) A method as claimed in claim 14, wherein the surfactant is a non-ionic surfactant.
16. (Currently Amended) A method as claimed in ~~any preceding~~ claim 1, wherein the quantity of zeolite is in the range of 5%-99%.
17. (Original) A method as claimed in claim 16 wherein the quantity of zeolite is in the range 70%- 99%.
18. (Currently Amended) A method as claimed in ~~any preceding~~ claim 1, wherein the sum of the quantity of ferrocyanide, complex acid and dye is in the range of 1%-95%.
19. (Original) A method as claimed in claim 18, wherein the sum of the quantity of ferrocyanide, complex acid, metal and dye is in the range of 1%-30%.
20. (Currently Amended) A method as claimed in ~~any preceding~~ claim 1, wherein the amount of resin is in the range of 1%-20%.
21. (Original) A method as claimed in claim 20, wherein the amount of resin is in the range 1 %-10%.
22. (Currently Amended) A method as claimed in ~~any preceding~~ claim 1; wherein sulphamic acid is used to acidify the dye.
23. (Currently Amended) A method as claimed in ~~any of claim~~ ~~of claim~~ ~~[[s]]~~ 1-~~21~~ wherein a carboxylic acid is used to acidify the dye.
24. (Original) A method as claimed in claim 23, wherein acetic acid is used to acidify the dye.